WHAT IS CLAIMED IS:

1   1. A method comprising:

2   sending a data packet configured based on a maximum packet

3   size along a path from a first network point to a second

4   network point;

5   along the path, generating fragment packets from the data

6   packet;

7   analyzing the size of at least one of the fragment packets

8   relative to a predetermined maximum packet size; and

9   depending on a result of the analysis, re-setting a maximum

10   packet size based on the size of one of the fragment packets.

1   2. The method of claim 1 also including re-setting the

2   maximum packet size equal to the size of one of the fragment

3   packets.

1   3. The method of claim 1 also including communicating the

2   new maximum packet size to the first network point.

1   4. The method of claim 1 also including communicating the

2   new maximum packet size from the second network point.

1   5. The method of claim 3 also including refraining from

2   communicating the new maximum packet size unless the maximum

3   packet size of the path has changed.

1   6. The method of claim 1 also including storing the maximum

2   packet size.

7. The method of claim 1 also including refraining from changing the maximum packet size if the fragment analyzed comprises the final fragment of the data packet.

8. The method of claim 1 in which the data packet that is sent along the path is of the largest size allowed by the network technology at the first point.

9. The method of claim 8 also including periodically repeating the sending, generating, analyzing, and resetting.

10. A method comprising determining, at a receiving point, a maximum data packet size of a network path from a sending point to the receiving point.

11. The method of claim 10 also including communicating the maximum data packet size to the sending point.

12. The method of claim 11 also including sending a message of the size of the maximum data packet size from the sending point to the receiving point.

13. The method of claim 10, in which the determining of the maximum packet size includes:

storing a predetermined maximum packet size;

sending a data packet from the sending point to the receiving point; and

comparing the size of the data packet to the predetermined maximum packet size.

14. The method of claim 13 also including, depending on the result of the comparison, re-setting the maximum packet size depending on the size of the data packet.

1   15.   The method of claim 14 also including, depending on

2   the result of the comparison, re-setting the maximum packet

3   size equal to the size of the data packet.

1   16.   The method of claim 10 also including reporting the

2   maximum packet size to a sending point.

1   17.   A method comprising:

2   sending a data message that is configured based on a maximum

3   packet size along a network path from a sending point to a

4   receiving point;

5   determining the size of the data message at the receiving

6   point; and

7   based on the determination, adjusting a maximum packet size

8   between sending and receiving points.

1   18.   The method of claim 17 also including:

2   fragmenting the data message if its size exceeds a

3   maximum packet size;

4   determining the size of the largest fragment; and

5   optimizing communication based on the determination.

1   19.   The method of claim 18, also including periodically

2   sending a test data message.

1   20.   The method of claim 19, in which the test message is

2   larger than the maximum packet size.

1   21.   A method comprising determining the maximum packet

2   size of a network path by sending a single data packet along

3   the network path.

1   22.   The method of claim 21, in which the single data
2   packet is larger than the maximum packet size.

1   23.   The method of claim 21, also including fragmenting
2   the packet into fragments.

1   24.   The method of claim 21, also including comparing the
2   size of a fragment to a predetermined maximum packet size.

1   25.   The method of claim 21, also including sending the
2   maximum packet size to a sending point on the network path.

1   26.   The method of claim 25, also including generating
2   packets at the sending point, the packets at least as small as
3   the maximum packet size.

1   27.   A method comprising:
2   sending a data packet on a path from a first network point
3   to a second network point;
4   along the path, generating fragment packets from the data
5   packet; and
6   analyzing at least one of the fragment packets to determine
7   a path maximum packet size.

1   28.   The method of claim 27 also including comparing the
2   size of the fragment to a predetermined maximum packet size.

1   29.   The method of claim 28 also including resetting the
2   predetermined maximum packet size to equal the size of the
3   fragment.

1 30. The method of claim 27 also including, based on the

2 comparison, choosing an optimal packet size for packets

3 sending packets from the first to the second network points.

1 31. A method comprising:

2 determining a maximum packet size of a network path; and

3 communicating the maximum packet size from a first point on

4 the path to a second point on the path.

5 32.

1 A method comprising:

2 sending a data packet along a network path, the data packet

3 being larger than the maximum packet size of the network path;

4 separating the packet into fragments; and

5 analyzing the size of the fragments to determine the maximum

6 packet size of the path.

1 33. A method comprising:

2 sending a message along a network path, the path

3 including sections, each of the sections having a maximum

4 message size limiting the size of messages passing through it,

5 the message being larger than the smallest maximum message

6 size of the sections;

7 fragmenting the message into fragments, the fragments

8 being at least as small as the smallest maximum message size;

9 and

10 at a receiving point, measuring the size of the largest

11 fragment.

1 34. The method of claim 33 also including communicating

2 the size of the largest fragment to a sending point.

1 35. The method of claim 34 also including comparing the

2 size of the largest fragment to a pre-determined maximum

3 message size.

1 36. A computer program embodied in a computer readable

2 medium, the program capable of configuring a computer to:

3 send a data packet along a path from a first network point

4 to a second network point;

5 along the path, generate fragment packets from the data

6 packet;

7 analyze the size of at least one of the fragment packets

8 relative to a predetermined maximum packet size; and

9 depending on a result of the analysis, re-set a maximum

10 packet size based on the size of one of the fragment packets.

11 37.

1 The program of claim 36, also capable of configuring a

2 computer to communicate the new maximum packet size to the

3 first network point.

1 38. A computer program embodied in a carrier wave, the

2 program capable of configuring a computer to:

3 send a data packet along a path from a first network point

4 to a second network point;

5 along the path, generate fragment packets from the data

6 packet;

7   analyze the size of at least one of the fragment packets

8   relative to a predetermined maximum packet size; and

9   depending on a result of the analysis, re-set a maximum

10   packet size based on the size of one of the fragment packets.

1   39.   The program of claim 38, also capable of configuring

2   a computer to communicate the new maximum packet size to the

3   first network point.

    40.   A medium bearing intelligence configured to enable a

    machine to effect actions that comprise

1   sending a data packet along a path from a first network

2   point to a second network point;

3   along the path, generating fragment packets from the data

4   packet;

5   analyzing the size of at least one of the fragment packets

6   relative to a predetermined maximum packet size; and

7   depending on a result of the analysis, re-setting a maximum

8   packet size based on the size of one of the fragment packets.